

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013050**Date Inspected:** 25-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai,China**CWI Name:** Mr.Tu Jun/Li Lin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

**Magnetic Particle Testing:-****BAY #10:-**

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as South Shaft Lift 4 Skin "A, B, C and D" Fit Lug and Diaphragm. The weld designations reviewed are as follows:-

SSTL4-1K/L- 6to19,36to57,63to69,75to85,101to118,124to131.

**Ultrasonic Testing:-****BAY # 11:-**

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an UT report for this date. The member is identified as Strut Connecting Angle Plate. The weld designations reviewed are as follows:-

ND1-SA4-68-123M-1,2,3,4,5,6,7,8-1A/B.

ED1-SA4-68-127M-1,2-1A/B.

ED1-SA4-68-131M-5,6,7,8-1A/B.

ND1-SA4-68-131M-1,2-1A/B.

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### IN PROCESS INSPECTION:-

#### BAY #10:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSTL4-3B/L-49 located on Diagonal Plate of “BC” Corner. Welder is identified as 037944.ZPMC CWI is identified as Mr.Tu Jun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2331-TC-P4-F-2.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: NSTL4-3B/L-24 located on Diagonal Plate of “CD” Corner. Welder is identified as 066479.ZPMC QC is identified as Mr. Deng Zhi Beng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P4-F-2.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: NSD1-TL5-3B/F-40B located on “AE” Corner Seam. Welder is identified as 052930.ZPMC QC is identified as Mr. Yu zhi lai. The welding variables recorded by QC appeared to comply with the WPS-B-T-3212-B-U5b-1.

#### BAY #11:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSTL4-2B/L-16 located on Diagonal Plate of “BC” Corner. Welder is identified as 040759.ZPMC CWI is identified as Mr.Li Lin. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSTL4-2B/L-22 located on Diagonal Splice Plate of “BC” Corner. Welder is identified as 049220.ZPMC QC is identified as Mr. Xu Jie. The welding variables recorded by QC appeared to comply with the WPS-B-T-2331-TC-P4-F.

This QA inspector observed the following work in progress:

SAW welding of weld joint no: ND1-STSA4-6-135-1-2A located on Strut Flange Plate. Welder is identified as 044550.ZPMC CWI is identified as Mr.An Qing Xiang. The welding variables recorded by QC appeared to comply with the WPS-B-T-4221-B-U3c-S-1.Please see the attached the picture.

This QA inspector observed the following work in progress:

SAW welding of weld joint no: WD1-SA4-56-135M-1-1B located on Connecting Angle Plate. Welder is identified as 042195.ZPMC CWI is identified as Mrs.Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS-B-T-3221-TC-U5-S-1.

This QA inspector observed the following work in progress:

ZPMC performed Buttering on Skirt Plate (WSD1-A804-A/B). The Buttering repair area is app. 6mm thick. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 040667.ZPMC QC is identified as Mr.Xu Jin

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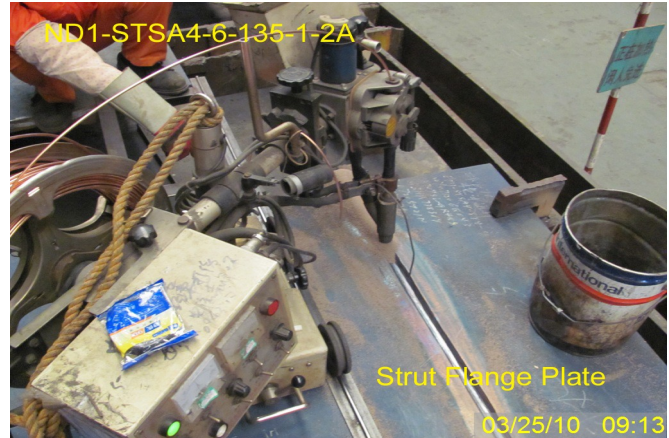
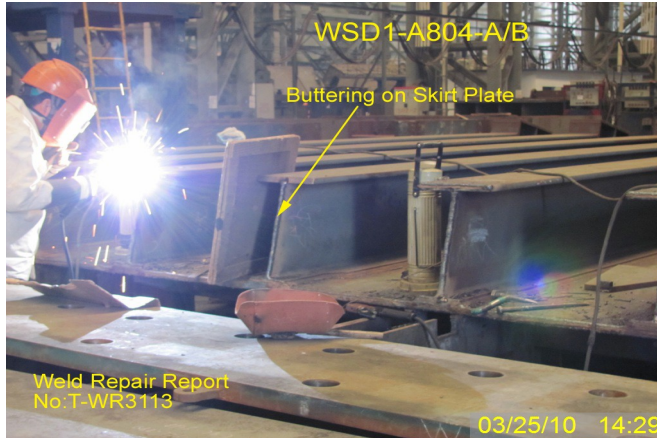
## WELDING INSPECTION REPORT

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Long. SMAW welding was been performed against welding repair report no:T-WR3113. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair. Please see the attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



### Summary of Conversations:

No Relevant Conversation.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pillai,Pandaram	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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